

REMARKS

The instant Amendment A is responsive to the first Office Action dated March 27, 2003. Amendment A is presented in the revised format authorized and described in *AMENDMENTS IN A REVISED FORMAT NOW PERMITTED*, signed January 31 and published in the *Official Gazette* on February 25, 2003.

Applicant respectfully submits that claims 1-16 and 18-26 as set forth herein patentably distinguish over the cited references, and respectfully requests allowance of all claims.

The current status of the claims

Claims 1-5, 7, 9, and 11-26 stand rejected under 35 U.S.C. §102(b) as being anticipated by Marcus (U.S. 6,074,074, hereinafter "Marcus").

Claims 6 and 8 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Marcus in view of Brookman (U.S. 5,337,225, hereinafter "Brookman").

Claim 10 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Marcus in view of Vadseth (U.S. 5,815,068).

Claims 1-10 patentably distinguish over the cited references

Claim 1 calls for, among other elements, a sheath at least partially made from a light-transmissive material, said sheath having a hollow region adapted to receive the LEDs, and an integrally formed cylindrical lens arranged to optically cooperate with the LEDs.

The Examiner has rejected claim 1, finding that element 7 in FIGURE 2 of Marcus corresponds to the least partially light-transmissive sheath called for in claim 1. However, column 5, lines 14-16, indicate that element 7 is made of aluminum, an aluminum alloy, or plastic. There is no suggestion that element 7 is "at least partially made from a light-transmissive material," and, indeed, the inclusion of openings 8 for light to emerge from (column 5, line 17) demonstrates that element 7 is opaque.

The Office Action does not directly state what feature of Marcus the Examiner views as corresponding to "an integrally formed cylindrical lens arranged to optically cooperate with the LEDs." Applicant does not find anything remotely resembling a

cylindrical lens anywhere in Marcus. The rejection of claim 5 suggests that the Examiner may view the elements 8 of Marcus as cylindrical lenses. However, the elements 8 are openings, not lenses. See column t, line 17 and also column 6, lines 41-42. Moreover, even if the elements 8 were lenses (which they are not), they would be circular lenses, not a cylindrical lens.

If the Examiner intends to maintain the anticipation rejections of claims 1 and 5, Applicant respectfully requests identification in Marcus of a cylindrical lens integrally formed with a sheath as called for in claim 1, with the particular orientation called for in claim 5.

Claim 2 calls for the sheath to include an extruded length of light-transmissive material of high refractive index, while claim 3 calls for the sheath to include an extruded length of wave guiding material. Applicant finds no disclosure or suggestion of either a high refractive index material or a wave guiding material anywhere in Marcus. In rejecting these features, the Office Action cites column 3, lines 7-10, which states: "a flexible sheath profile which is extruded thereon and is formed from a transparent material." However, the passage goes on: "Such a conductor strip or illumination strip provides absolute sealing, of course." The sheath is therefore a sealant; there is no suggestion of selecting a sheath material for its optical properties other than transparency. More specifically, there is no suggestion of selecting either a high refractive index material or a wave guiding material.

The rejection of claim 7 equates element 4 with an LED socket. Element 4 is called an LED element and is secured to the printed circuit board 10 (see column 5, lines 21-31). Applicant has been unable to find disclosure in Marcus on how the securing is achieved. In particular, nowhere does it appear to be expressly taught or suggested to use a socket connection. For example, there is nothing to indicate that the LED elements 4 are not in fact soldered to the printed circuit board 10, as is a common practice.

For at least these reasons, Applicant respectfully requests reconsideration of claims 1-10 and requests an allowance of these claims.

Claims 11-15 pat ntably distinguish over the cited referenc s

Claim 11 has been amended to call for an extended cylindrical lens, having a length substantially coextensive with a length of the following tube, with which the plurality of light-emitting elements is coupled.

This amendment is supported in the specification at least by FIGURES 1-3 (where element 18 is the cylindrical lens), FIGURE 5 (element 118 is the cylindrical lens) and at paragraph 0029. Further support is provided at paragraph 0039 where the sheath 16, 116 is described as preferably extruded having a selected cross section. Extrusion of a tube inherently produces a fixed cross section such as that shown in FIGURE 3, defining cylindrical lens 18 having a cylinder axis extending alongside the hollow tube.

Marcus does not disclose such a cylindrical lens. Based on the explanation for rejecting claim 5 set forth in the Office Action, it appears that the Examiner may have mistaken the openings 8 of Marcus for lenses. An opening is not equivalent to a lens, and moreover, the openings 8 are not cylindrical and are not substantially coextensive with a length of the hollow tube.

Brookman does not remedy these deficiencies of Marcus. Brookman shows a transparent portion 36 of molding 32 (FIGURE 2 and column 3, lines 10-18) which appears to be coextensive with the molding. However, the transparent portion 36 is not identified as a lens, and there is not suggestion therein that the transparent portion 36 provides any sort of lensing or other optical effect.

Claim 12 calls for the extended cylindrical lens to define a waveguide portion that distributes light generated by the light-emitting elements along the tube. Neither Marcus nor Brookman mention waveguiding.

Claim 13 calls for the extended cylindrical lens to refract light generated by the light-emitting elements in a plane perpendicular to the tube. There is no suggestion of any such refracting or, indeed, of any lensing effect at all in Marcus and Brookman.

For at least these reasons, Applicant submits that claims 11-15 are now in condition for allowance and respectfully requests allowance of claims 11-15.

Claims 16 and 18-22 patentably distinguish over the cited references

Claim 16 has been amended to incorporate subject matter of canceled claim 17 specifying that the light transmissive tube includes an integral optical element that distributes light emitted by the plurality of light-emitting elements along the lighting strip.

Neither Marcus nor Brookman disclose an optical element integral with a light-transmissive tube that distributes light along a lighting strip. The Office Action cites Marcus, column 2, lines 19-22, in rejecting claim 17. Applicant finds no reference to an integral optical element there. There is an integrally formed cover, but no suggestion of incorporating an integral optical element of any kind into the cover, much less an integral optical element that distributes light along a light-emitting strip. Elsewhere in Marcus, a transparent sheath 52 is shown sealing light-emitting diodes (see FIGURE 17 and column 7, lines 48-53). However, the sheath 52 does not include an integral optical element for light distribution along the lighting strip. Regarding Brookman, the transparent portion 36 of molding 32 transmits light, but there is not teaching or suggestion that the transparent portion 36 distributes light along the lighting strip.

Claim 18 calls for the integral optical element to be a lens. Neither Marcus nor Brookman disclose any sort of lens, much less a lens integrally formed with the tube as called for in claim 18.

For at least these reasons, Applicant submits that claims 16 and 18-22 are now in condition for allowance and respectfully request allowance of claims 16 and 18-22.

Claims 23-26 patentably distinguish over the cited references

Claim 23 has been amended to call for, simultaneously with the extruding of the sheath, extruding an integral optical element parallel to and formed with the sheath. Support for this amendment is provided in the specification at least at paragraph 0039 and FIGURE 3, where the extruding of the sheath 16 inherently includes simultaneous extrusion of the integral cylindrical lens 18.

Neither Marcus nor Brookman disclose simultaneously extruding a sheath and an optical element parallel to and formed with the sheath. Marcus does not disclose an optical element of any sort, much less an optical element extruded with an extruded sheath. Applicant does not view Brookman as disclosing an optical element; however,

even if the transparent portion 36 of the molding 32 is viewed as an "optical element," there is no suggestion that it can be extruded with the opaque portion 34 of the molding 32. Indeed, since the opaque and transparent portions 34, 36 are made of different materials, a complex and perhaps unachievable co-extrusion process would appear to be required to effect simultaneous extrusion of both parts.

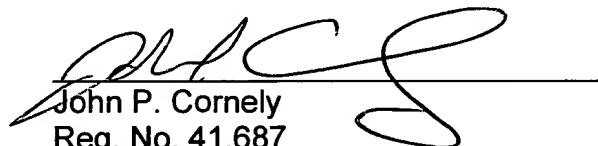
For at least these reasons, Applicant submits that claims 23-26 are now in condition for allowance and respectfully request allowance of claims 23-26.

CONCLUSION

For the reasons set forth above, it is submitted that all claims 1-16 and 18-26 as set forth herein patentably distinguish over the references of record. Accordingly, an early indication of allowance is earnestly solicited.

Respectfully submitted,

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